

## World Agriculture & Trade



### China's Grain Policy At a Crossroads

China's grain sector and its policy-makers are adjusting to internal and external pressures that could reshape the industry. As consumers diversify their diets, they are demanding less grain but of higher quality. Government policymakers and the grain marketing system have been slow to adjust to changing consumer preferences. As a result, large stocks of low-quality grain accumulated in the 1990s. Government policy emphasis is now shifting from grain quantity to quality. China's pending accession to the World Trade Organization (WTO) may introduce external competition for both farmers and grain traders that will hasten the shift.

USDA estimates that China's production of wheat, corn, and rice fell by a combined 44 million tons in 2000/01. Grain production is likely to be lower again in 2001/02, as sown area in grain fell further and a second straight year of drought cut into corn and wheat yields.

With apparent tightening of domestic supplies, many observers have been puzzled by China's apparent lack of interest in grain imports. China has historically been a major importer of wheat, with annual imports of 4-15 million metric tons earlier in the 1990s. But over the past several

years, wheat imports have been at minimal levels of 1 million tons or less, and are projected to remain near that level in 2001/02. China also clamped down on corn imports and exported corn at near-record rates during calendar year 2000. Corn exports in the first half of 2001 continued, although at a reduced pace.

#### *Mid-1990s Policy Boosted Grain Production*

China's grain sector is emerging from a huge burst of grain production in the mid-1990s, arising from the government's historical approach to food policy that emphasized massive grain production. After five decades of grain policy had focused on ensuring adequate domestic supply, China is now learning to cope with a new problem: too much grain. What's more, the grain on hand often lacks the quality attributes sought by increasingly affluent and discriminating Chinese consumers. With China's accession to the WTO expected in late 2001 or early 2002, the Chinese grain sector faces pressure from both external competition and internal shifts in consumer preferences which could reshape the industry.

Historically, the problem of producing enough grain to feed China's massive

population was a high national priority. Seed technologies, expansion of irrigated areas, adoption of chemical and other modern inputs, and rural reforms such as the household production responsibility system begun in the late 1970s, combined to keep grain production on an upward trend over the past four decades. Combined production of corn, wheat, and rice (the three most important grains in China) grew from about 100 million tons after the disastrous famine of the early 1960s to 200 million tons in the late 1970s, due mostly to devoting ever-greater quantities of labor and land to grain production. After the introduction of market-oriented reforms in 1978, total grain production grew even more rapidly to 390 million tons in the late 1990s, an increase of 90 percent in 20 years.

After years of growth, China's policy makers became concerned when grain production hit a plateau in the early 1990s. Food prices rose, and localized grain shortages occurred, as land was taken out of grain production in areas surrounding booming coastal cities. To ease the mounting pressure of food security concerns, the government initiated the "Governor's Grain Bag" policy in 1994-95 to boost grain production. The government increased procurement prices and mandated that minimum grain production and reserve levels be met by provincial governments. In response, combined wheat, rice, and corn production rose from 322 million tons in 1994/95 to 375 million tons in 1996/97. Production remained at high levels through 1999.

The "grain bag" policy reflected the government's traditional approach to food policy of setting quotas and targets and marshalling inputs to ensure that grain production is sufficient to feed the population. This retrenchment from market-oriented policies in the early 1990s achieved an increase in grain output by inducing farmers to shift land and other agricultural inputs to grain. By contrast, gains in the 1970s and 1980s resulted from rising productivity and efficiency as market signals brought about a more efficient allocation of resources.

The "grain bag" policy, aided by favorable weather and imports, yielded more grain than China could handle. Imports in

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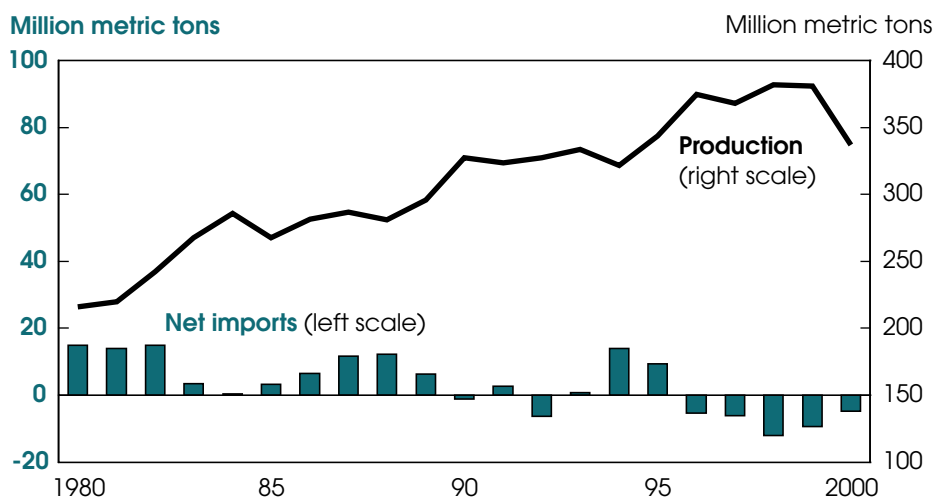
1994 and 1995 added to the flood of grain. By all accounts, grain storage facilities were filled beyond capacity in the late 1990s. The actual size of China's grain stocks is unknown, since it is considered a state secret, but estimates were as high as 500 million tons (including both commercial and onfarm stocks) at the end of calendar year 2000.

The surge in grain production in the mid-1990s occurred at the same time grain consumption growth was slowing. Demand for food grains stagnated in the 1990s, as rising incomes allowed more consumers to diversify their diets to include more meat, fish, fruits, vegetables, and edible oils—and less grain. Chinese statistics indicate that at-home per capita food grain consumption (rice and wheat) fell 13 percent between 1990 and 2000. Population grew by about 11 percent over the same period, but not enough to offset the decline in per capita consumption. Rising use of grain in processed foods and restaurant meals may have offset the decline in at-home consumption to some degree, but the overall trend in food-grain consumption appears to have been flat or declining in the 1990s.

On a per capita basis, China's production of rice and wheat dipped to 186 kilograms in 1994 (prior to the "grain bag" policy) before rising sharply to 213 kilograms in 1997. At the same time, per capita home consumption was falling as measured by China's household expenditure surveys. This suggests a widening gap between production and consumption during the mid-1990s. (These figures are not precise measures of supply and demand since they do not account for trade, feed, industrial use, or food away from home). In this context, the drop in production in 2000 appears to be a needed correction to align production with consumption. Per capita production of rice and wheat dropped from 200 to 183 kilograms between 1999 and 2000, narrowing the difference between per capita production and at-home consumption from 32 to 15 kilograms.

Large grain supplies pushed down prices in 1999 and 2000, discouraging farmers from planting grain. Many diverted acreage to cotton, oilseeds, vegetables, fruits, and fish ponds. Elimination of pro-

### China's Net Grain Imports Remain Negative in 2000 Despite Drop in Production

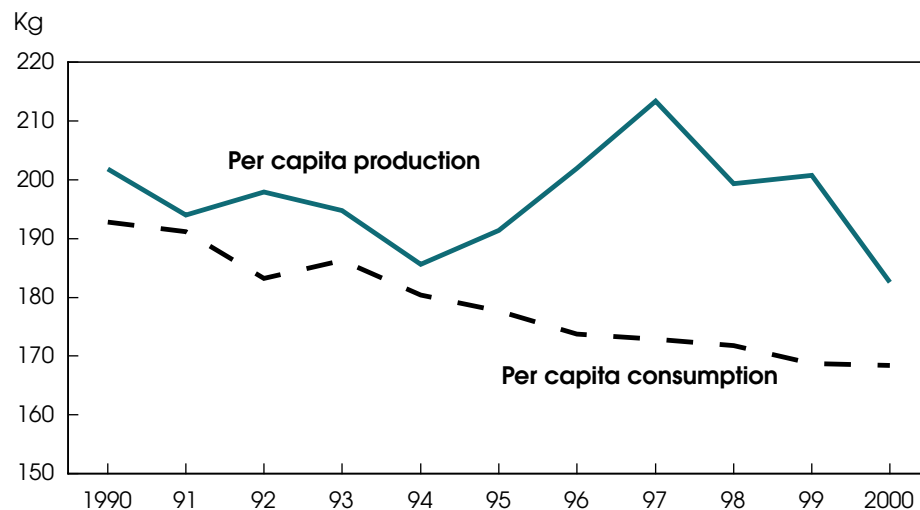


Corn, wheat, and rice.

Source: ERS analysis of USDA Production, Supply, and Distribution data.

Economic Research Service, USDA

### Per Capita Consumption of Wheat and Rice in China Continues Long-Term Decline



Per capita consumption is a weighted average of rural and urban averages. Excludes food consumed away from home, and feed or industrial use. Per capita production is China's rice and wheat production divided by total population.

Source: ERS analysis of data from USDA and from China National Bureau of Statistics.

Economic Research Service, USDA

curement quotas for several kinds of low-quality wheat and rice also contributed. Reports of grain being rejected by procurement stations for failing to meet quality standards may also have discouraged

the planting of some types of grains in recent years.

From 1999 to 2001, the government has focused on reducing its huge stocks of grain. That is why, for example, China

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had record corn exports (aided by government subsidies) of nearly 10 million tons during 1999/2000, a year of severe drought in corn growing areas. In the past year, both USDA and the United Nations Food and Agriculture Organization revised their estimates of Chinese grain stocks upward by a substantial amount to more accurately reflect the situation. In 2001, indications are that while stocks have come down quite a bit, they are still substantial.

### *Emphasis Shifting from Quantity to Quality*

China's millers and bakers are now seeking grain with specific attributes sought by increasingly affluent Chinese consumers. Wheat must be suitable for breads, baked goods, and instant noodles. Bread makers demand high-protein and high-gluten wheat, while makers of cakes and crackers demand low-protein wheat. Most of China's wheat is between these two extremes. Rice must be high in quality, with a precise taste, texture, and stickiness when cooked.

Demand for high-quality wheat and rice is often met by imports. While China has been a net exporter of rice in recent years, southern residents have developed a taste for imported quality fragrant rice, mostly from Thailand. Millers are reportedly willing to pay premium prices for quality imported wheat to supply China's booming baking industry. Some types of imported wheat have been unavailable at any price in recent years as the government maintained very low import quotas in order to draw down its excessive grain stocks. China restricts imports of grain through unannounced quotas and administrative decisions (AO June-July 1999). Millers have had to make do with domestic wheat, the price of which is significantly above world levels.

China's goal is to supply high-quality grain from domestic sources, but reliance on administrative methods rather than market-based price signals has failed to adequately transmit changing consumer preferences to producers. New national grading standards for rice were introduced in 1999, but many farmers do not know how to interpret the standards.

### More Detailed Report in Progress

Information in this article is drawn from the annual China International Agriculture and Trade Report, which USDA's Economic Research Service will publish in late 2001. The report explains China's grain reserve policies and provides background information on how USDA produced its new grain reserve estimates in May 2001.

Among the conclusions in the broader report are the following:

- China's huge appetite for soybeans to feed its emerging livestock and edible oils industries continues to grow, with soybean imports expected to reach a record 13.2 million tons in 2000/01.
- Surging textile and apparel exports boosted demand for cotton and encouraged farmers to increase cotton acreage in 2001, but China remained a net exporter of cotton in 2000/01 as imports were restrained at minimal levels.
- China's livestock sector is internationally competitive in terms of production costs, but sanitary issues limit export potential. Meanwhile, the grain sector's competitiveness has eroded.
- In the long run, continued rapid growth and openness to trade in China will stimulate demand for food and fiber, but stagnant rural incomes and growing regional inequality temper optimism.
- Entrenched rural policies and institutions impede efficient resource allocation in rural China, dampening agricultural productivity and income growth.
- Following China's WTO accession, imports of wheat, cotton, soybeans, edible oils, and soy meal are likely to rise. China's rice exports are expected to rise, and its corn exports will likely fall.

Three new premium rice grades were established in 2000. New wheat grades were established with specific end uses in mind. "Quality" wheat includes both high-gluten varieties that are suitable for western-style bread and bakery products and low-gluten/low-protein varieties for cookies, cake mixes, and crackers. High-gluten wheat is further classified into two grades based on gluten and protein content. "Regular" wheat is classified into five grades on the basis of weight, percentage of imperfect grains, and foreign materials. There are also minimum standards for foreign materials, moisture, color, and smell that all wheat grades must meet.

The government has identified areas that produce "high-quality" wheat, and pays an apparently arbitrary 10-percent premium for this wheat. According to grain bureau analysts, "high-quality-special use" wheat constituted 16 percent of wheat area in 2000/01, up from less than 5 percent in 1998. The Ministry of Agriculture set a target of 20 million tons of "high-quality" wheat production by 2005. It is not clear,

however, whether these statistics accurately reflect the pace of improvement in China's wheat quality. The statistics indicate the quantity of wheat grown in areas declared as "high quality," but they do not necessarily reflect the actual quality of the output. A common complaint of millers is the lack of homogeneity in wheat delivered to them.

The lack of adequate price incentives offered by the government-sponsored grain bureau has slowed the response of producers to changing consumer preferences. The government sets prices for grain purchased to fulfill mandatory quotas, and for sales above the quota. These prices only dimly reflect market forces. Until 1999, the government made little distinction between prices it paid for *indica* and *japonica* rice varieties, even though low-quality early *indica* rice commanded a lower market price. The government also procured large quantities of low-quality spring wheat from northeastern provinces. As a result, grain bureaus accumulated large stocks of low-quality grain for which there is almost no demand.

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Reportedly, a rising proportion of food grains has been sold or exported to neighboring countries such as South Korea as animal feed or lost to spoilage as prospects for marketing these low-quality grains have dimmed. Carrying costs of these mounting surpluses have been a financial burden to the grain bureau system.

The grain bureau is slowly responding to the changing market. In 2000, procurement prices were eliminated for low-quality spring wheat grown in China's northeast, all wheat grown south of the Yangtze River, and low-quality *indica* rice grown in southeastern coastal provinces. Without the incentive of the procurement price, spring wheat production in the northeast (including Jilin, Liaoning, Heilongjiang, and Inner Mongolia) dropped by 59 percent in 2000, according to estimates from within China. Some local grain procurement stations have also reportedly rejected grain that failed to meet quality standards. While this is a step toward meeting consumer preferences, better transmission of market-based price signals to producers and greater attention to grading standards will be needed to ensure that the type of wheat grown by producers is in line with consumer demand.

Increased competition in grain marketing may improve the economy's ability to transmit market signals from the changing consumer market to the producer. A substantial private trade already exists, and contracting with mills and processors is also emerging, but the government grain bureau system remains dominant. A major grain marketing reform in 1998 aimed to separate the grain bureau's previously

intertwined food policy and commercial functions.

The government intends to spin off entities from the grain bureau system that would become commercial grain trading operations to promote competition in grain marketing. Remaining government entities would focus on maintaining policy-oriented grain reserves. The separation of policy and commercial operations and the increase in competition is likely to give commercial grain traders incentives to pay prices that more closely reflect final consumer demand.

### **WTO Accession Will Increase Competition**

China's long-anticipated WTO accession, now expected in late 2001/early 2002, will also introduce more competition. Currently, foreign trade in grains is dominated by state entities and is carefully controlled by the central government. After entering the WTO, China will establish tariff-rate quotas for wheat, corn, and rice. Imports up to the annual quota amount for each commodity will be allowed at low tariff rates of 1 percent, and imports above the quota will be assessed high tariffs of 80 percent for rice and corn and 77 percent for wheat. Over the 5 years following accession (beginning probably in 2002), the quotas will increase and above-quota tariffs will decline yearly.

WTO accession is expected to weaken the monopoly of state trading entities in China's grain trade. A share of each year's tariff-rate quota will be reserved for non-

state trade entities in order to encourage private-sector participation. Half of the long grain rice quota will be reserved for private traders, and for corn the private share will be set initially at 25 percent, rising to 40 percent over 5 years. Wheat and short grain rice trade will still be dominated by government entities, as private shares are set at just 10 percent. The greater role of nonstate traders following WTO accession has considerable potential to increase competition in China's grain trade, though the licensing procedure and quota allocation process are largely unknown to traders.

It is widely recognized that WTO accession will increase competition for Chinese farmers by allowing more wheat imports and reducing corn exports (corn export subsidies will end after WTO accession). China's rice, which is more competitive internationally, will not feel much direct effect. As China's meat and dairy consumption rise, derived demand for corn to feed growing livestock herds will shift grain area away from food grains to corn and other feed grains. China is expected to become a net importer of corn within the next decade, a trend that may be hastened by WTO accession. **AO**

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